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| APPLICATION NO. FILING DATE FIRST   | NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. |
|-------------------------------------|-----------------------------------------------------|
| 10/659,635 09/09/2003               | R. Craig Miller MIL-2.001 5205                      |
| 22874 7590 09/10/2004               | EXAMINER                                            |
| BRADLEY M GANZ, PC<br>P O BOX 10105 | VALENZA, JOSEPH E                                   |
| PORTLAND, OR 97296                  | ART UNIT PAPER NUMBER                               |
| ,                                   | 3651                                                |

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Application No.                                       | Applicant(s)          | $\alpha$ |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------|----------|--|
| Office Action Comments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10/659,635                                            | MILLER ET AL.         | 8)       |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Examiner                                              | Art Unit              |          |  |
| The MAN INC DATE of this communication and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Joseph Valenza                                        | 3651                  | 4        |  |
| The MAILING DATE of this communication app<br>Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ears on the cover sheet with the c                    | orrespondence add     | aress    |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                       |                       |          |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                       |                       |          |  |
| 1) Responsive to communication(s) filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                       |                       |          |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | action is non-final.                                  |                       |          |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                       |                       |          |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                       |                       |          |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                       |                       |          |  |
| 4) ☐ Claim(s) 1-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                       |          |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                       |                       |          |  |
| 9) The specification is objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                       |                       |          |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                       |                       |          |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                       |                       |          |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                       |                       |          |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | aminer. Note the attached Office                      | Action of logilit F I | Q-132.   |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                       |                       |          |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                   |                                                       |                       |          |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                       |                       |          |  |
| 1) Notice of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4) Interview Summary                                  |                       |          |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 1/8/04.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: |                       | -152)    |  |

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## **DETAILED ACTION**

1. Claims 1-5, 7, 9-12, 14-16, 18, 22-28 and 30 are rejected under 35 U.S.C. 102(a and b) as being anticipated by Newton (b), Cuniberti (b), Hara (b), Remensperger (b) or Sanchez de Leon Rodriguez Roda (a).

In Newton, note first transport surface 12, lateral shift mechanism 23 and second transport surface 26. In Cuniberti, note first transport surface 42, lateral shift mechanism 53 and second transport surface 25. In Hara, note first transport surface 5, lateral shift mechanism 25 and second transport surface 3. In Remensperger, note first transport surface 22, lateral shift mechanism 44, 46, 54 and 56 and second transport surface 18. In Sanchez de Leon Rodriguez Roda, note first transport surface 1, 1', lateral shift mechanism (column 3 lines 65 and 66) and second transport surface (unnumbered and downstream of the first transport surface.

With regard to claims 2 and 18, as broadly claimed and based on applicant's page 16 lines 5-19, the conveyor having the second transport surface can be considered to be an axial spacing apparatus. Note that claims 2, 16 and 18 do not require a spacing change between longitudinally positioned articles. However, concerning claim 2, conveyor 26 of Newton, conveyor 25 of Cuniberti, conveyor 3 of Hara, conveyor 18 of Remensperger and the unnumbered conveyor of Sanchez de Leon Rodriguez Roda each change longitudinal spacing between articles.

With regard to claims 3 and 27, sensor 1LS (column 5 lines 70-75) of Cuniberti, unshown sensor (column 3 lines 33-40) of Hara, sensors 58, 62 and 60, 64 of

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Remensperger and sensors 3 of Sanchez de Leon Rodriguez Roda sense the article arrival on the first transport surface.

With regard to claim 4, the circuitry between the article sensor and the lateral shift mechanism would be the controller.

With regard to claims 5 and 28, step switch SS-1 of Cuniberti adjusts the length of lateral reciprocation of the first transport surface.

With regard to claims 9 and 24, Hara, Remensperger and Sanchez de Leon Rodriguez Roda apply.

With regard to claims 10 – 12, 14, 18, 22, 23 and 25, Newton and Sanchez de Leon Rodriguez Roda apply.

With regard to claim 15, only Sanchez de Leon Rodriguez Roda applies.

2. Claims 6, 8, 13, 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Newton, Cuniberti, Hara, Remensperger or Sanchez de Leon Rodriguez Roda.

With regard to claim 6 and 13, the design (contact or contactless) of the article sensor is immaterial to the operation of the system. Therefore the sensors in the prior art are the functionally equivalents to the claimed sensor.

With regard to claim 8, the use of a timing means to control the speed of the conveyor has not been proven to be critical to the operation of the claimed system. Therefore, the belt drives of the prior art systems are considered to be functionally equivalent.

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With regard to claim 13, Remensperger and Sanchez de Leon Rodriguez Roda apply.

With regard to claims 16, 19 and 20, since the arrangement of articles is not nested on the first transport surface of Newton and Sanchez de Leon Rodriguez Roda and the article arrangement is nested on their second transport surface, it is clear that the need for an axial spacing apparatus as claimed (upstream or downstream of the transport surface with the lateral shift mechanism) adds no value over the functionally equivalent systems in Newton and Sanchez de Leon Rodriguez Roda.

3. Claims 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanchez de Leon Rodriguez Roda in view of Goranson.

It would have been obvious that the oven 17 of Goranson could be added to the unnumbered conveyor downstream of first surface 1, 1' of Sanchez de Leon Rodriguez .

Roda.

4. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newton, Cuniberti, Hara, Remensperger or Sanchez de Leon Rodriguez Roda in view of Nordstrom.

It would have been obvious to add the teachings of speed control in column 9 lines 1-3 of Nordstrom to any of the conveyors in the prior art systems in order to achieve separation of the array of articles into spaced arrays as taught by Nordstrom.

5. Claims 8, 19 and 20 are rejected under 35 U.S.C. 112 for the following reasons.

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With regard to claim 8, the use of a timing means to control the speed of the conveyor has not been adequately disclosed. Structurally and functionally how is the timing means to control the speed of the conveyor.

With regard to claims 19 and 20, the disclosure is inadequate to make it clear structurally how the axial spacing apparatus is designed and what function it performs since the speed difference between the upstream first transporting surface and the downstream second transporting surface cause an axial spacing difference.

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the timing means of claim 8 and the axial spacing apparatus of claims 19 and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of

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the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The

objection to the drawings will not be held in abeyance.

7. Any inquiry concerning this communication should be directed to Joseph E.

Valenza at telephone number (703) 308-2577. Amendments may be faxed to (703) 872-

9306. My normal work week is Monday through Thursday.

JOSEPH E. VALENZA PRIMARY EXAMINER